

### **ABSTRACT**

A compression/decompression (codec) engine is provided for use in conjunction with a fabric agent chip in a multiprocessor computer system. The fabric agent chip serves as an interface between a first memory controller on a first cell board in the computer system and other memory controllers on other cell boards in the computer system. Cell boards in the computer system are interconnected by a system fabric. Memory data read by the first memory controller is compressed by the codec engine prior to being transmitted over the system fabric by the fabric agent chip. Conversely, memory data received over the system fabric by the fabric agent chip is decompressed by the codec engine prior to being provided to the first memory controller. Other fabric agent chips in the computer system may similarly be provided with corresponding codec engines.